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AMENDMENTS TO THE CLAIMS

Please amend claim 1, and please cancel claims 2, 3, 6, 7, 8, 22, 23, 26, and 29 as shown below in the "Listing of the Claims" without prejudice to Applicants' rights to pursue such claims in a timely filed divisional or continuation application(s). Please add new claims 30-34 as also shown below in the "Listing of the Claims". The amendments to claim 1 are shown with highlighting for the Examiner's convenience.

LISTING OF THE CLAIMS

1. (Currently Amended): A compound having the structure I, a tautomer of the compound, a pharmaceutically acceptable salt of the compound, or a pharmaceutically acceptable salt of the tautomer

$$R^4$$
 R^5
 R^7
 R^7
 R^3
 R^4
 R^5

wherein,

Y is an -NR¹⁰R¹¹ an -NH₂ group;

Z is an NR¹³ group:

R¹ and R² join to form a 6 membered substituted or unsubstituted ring comprising at least one O, N, or S atom;

R³ and R¹³ may be the same or different and are selected from the group consisting of H, -OH, substituted and unsubstituted alkoxy groups, substituted and

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unsubstituted aryloxy groups, -NH₂, substituted and unsubstituted alkylamino groups, substituted and unsubstituted dialkylamino groups, substituted and unsubstituted and unsubstituted and unsubstituted (alkyl)(aryl)amino groups, substituted and unsubstituted (alkyl)(aryl)amino groups, substituted and unsubstituted diheterocyclylamino groups, substituted and unsubstituted diheterocyclylamino groups, substituted and unsubstituted and unsubstituted and unsubstituted and unsubstituted (alkyl)(heterocyclyl)amino groups, substituted and unsubstituted heterocyclyloxy groups, substituted and unsubstituted alkyl groups, substituted and unsubstituted and unsub

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 $R^4 \cdot R^5 \cdot R^6$ and R^7 may be the same or different and are independently selected from the group consisting of H, Cl, Br, F, I, -NO₂, -CN, -OH, -OR¹⁴ groups. -NR 15 R 16 groups, -C(=O)R 17 groups, -SH, -SR 18 groups, -S(=O)R 19 groups, S(=O) $_2$ R 20 groups, substituted and unsubstituted amidinyl groups, substituted and unsubstituted quanidinyl groups, substituted and unsubstituted primary, secondary, and tertiary alkyl groups, substituted and unsubstituted aryl groups, substituted and unsubstituted alkenyl groups, substituted and unsubstituted alkynyl groups, substituted and unsubstituted heterocyclyl groups, substituted and unsubstituted alkylaminoalkyl groups, substituted and unsubstituted dialkylaminoalkyl groups, substituted and unsubstituted arylaminoalkyl groups, substituted and unsubstituted diarylaminoalkyl groups, substituted and unsubstituted (alkyl)(aryl)aminoalkyl groups, substituted and unsubstituted heterocyclylalkyl groups, substituted and unsubstituted aminoalkyl groups, substituted and unsubstituted heterocyclylaminoalkyl groups, substituted and unsubstituted diheterocyclylaminoalkyl groups, substituted and unsubstituted (alkyl)(heterocyclyl)aminoalkyl-groups, substituted and unsubstituted (aryl)(heterocyclyl)aminoalkyl-groups, substituted and unsubstituted hydroxyalkyl groups, substituted and unsubstituted alkoxyalkyl groups, and substituted and unsubstituted aryloxyalkyl groups, and substituted and unsubstituted heterocyclyloxyalkyl groups;

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R⁵ and R⁶ may be the same or different and are independently selected from the group consisting of H. Cl. Br. F. I. -NO₂, -CN, -OH, -OR¹⁴ groups, -NR¹⁵R¹⁶ groups, $-C(=O)R^{17}$ groups, -SH, $-SR^{18}$ groups, $-S(=O)R^{19}$ groups, $S(=O)_2R^{20}$ groups, substituted and unsubstituted amidinyl groups, substituted and unsubstituted guanidinyl groups, substituted and unsubstituted primary, secondary, and tertiary alkyl groups, substituted and unsubstituted aryl groups, substituted and unsubstituted alkenyl groups, substituted and unsubstituted alkynyl groups, substituted and unsubstituted heterocyclyl groups, substituted and unsubstituted alkylaminoalkyl groups, substituted and unsubstituted dialkylaminoalkyl groups, substituted and unsubstituted arylaminoalkyl groups, substituted and unsubstituted diarylaminoalkyl groups, substituted and unsubstituted (alkyl)(aryl)aminoalkyl groups, substituted and unsubstituted heterocyclylalkyl groups, substituted and unsubstituted aminoalkyl groups, substituted and unsubstituted heterocyclylaminoalkyl groups, substituted and unsubstituted diheterocyclylaminoalkyl groups, substituted and unsubstituted (alkyl)(heterocyclyl)aminoalkyl groups, substituted and unsubstituted (aryl)(heterocyclyl)aminoalkyl groups, substituted and unsubstituted hydroxyalkyl groups, substituted and unsubstituted alkoxyalkyl groups, substituted and unsubstituted aryloxyalkyl groups, and substituted and unsubstituted heterocyclyloxyalkyl groups;

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wherein at least one of R⁵ or R⁶ is a substituted or unsubstituted heterocyclyl group;

R¹⁰-is selected from the group consisting of H, substituted and unsubstituted alkyl groups, substituted and unsubstituted aryl groups, and substituted and unsubstituted heterocyclyl groups;

R¹¹ is selected from the group consisting of H, substituted and unsubstituted alkyl groups, substituted and unsubstituted aryl groups, substituted and unsubstituted heterocyclyl groups, OH, alkoxy groups, aryloxy groups, NH₂, substituted and unsubstituted heterocyclylalkyl groups, substituted and unsubstituted aminoalkyl groups, substituted and unsubstituted

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and unsubstituted dialkylaminoalkyl groups, substituted and unsubstituted arylaminoalkyl groups, substituted and unsubstituted diarylaminoalkyl groups, substituted and unsubstituted (alkyl)(aryl)aminoalkyl groups, substituted and unsubstituted alkylamino groups, substituted and unsubstituted arylamino groups, substituted and unsubstituted dialkylamino groups, substituted and unsubstituted diarylamino groups, substituted and unsubstituted (alkyl)(aryl)amino groups, -C(=O)H, -C(=O)-alkyl groups, -C(=O)-aryl groups, -C(=O)O-alkyl groups, -C(=O)O-aryl groups, -C(=O)NH₂, -C(=O)NH(alkyl) groups, -C(=O)NH(aryl) groups, -C(=O)N(alkyl)₂ groups, -C(=O)N(aryl)₂ groups, -C(=O)N(alkyl)(aryl) groups, -C(=O)-heterocyclyl groups, -C(=O)-O-heterocyclyl groups, -C(=O)NH(heterocyclyl) groups, -C(=O)-N(heterocyclyl)₂ groups, -C(=O)-N(alkyl)(heterocyclyl) groups, -C(=O)-N(aryl)(heterocyclyl) groups, substituted and unsubstituted heterocyclylaminoalkyl groups, substituted and unsubstituted diheterocyclylaminoalkyl groups, substituted and unsubstituted (alkyl)(heterocyclyl)aminoalkyl groups, substituted and unsubstituted (aryl)(heterocyclyl)aminoalkyl groups, substituted and unsubstituted hydroxyalkyl groups, substituted and unsubstituted alkoxyalkyl groups, substituted and unsubstituted aryloxyalkyl groups, and substituted and unsubstituted heterocyclyloxyalkyl groups;

R¹⁴ is selected from the group consisting of substituted and unsubstituted alkyl groups, substituted and unsubstituted aryl groups, substituted and unsubstituted heterocyclyl groups, substituted and unsubstituted heterocyclylalkyl groups, -C(=O)H, -C(=O)-alkyl groups, -C(=O)-aryl groups, -C(=O)-heterocyclyl groups, -C(=O)NH₂, -C(=O)NH(alkyl) groups, -C(=O)NH(aryl) groups, -C(=O)N(alkyl)₂ groups, -C(=O)N(aryl)₂ groups, -C(=O)N(alkyl)(aryl) groups, -C(=O)NH-heterocyclyl groups, -C(=O)N-(heterocyclyl)₂ groups, -C(=O)N(alkyl)(heterocyclyl) groups, -C(=O)N(aryl)(heterocyclyl) groups, substituted and unsubstituted aminoalkyl groups, substituted and unsubstituted alkylaminoalkyl groups, substituted and unsubstituted dialkylaminoalkyl groups, substituted and unsubstituted arylaminoalkyl groups, substituted and unsubstituted diarylaminoalkyl groups, substituted and unsubstituted (alkyl)(aryl)aminoalkyl groups, substituted and unsubstituted heterocyclylaminoalkyl

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groups, substituted and unsubstituted diheterocyclylaminoalkyl groups, substituted and unsubstituted (heterocyclyl)(alkyl)aminoalkyl groups, substituted and unsubstituted (heterocyclyl)(aryl)aminoalkyl groups, substituted and unsubstituted alkoxyalkyl groups, substituted and unsubstituted aryloxyalkyl groups, and substituted and unsubstituted heterocyclyloxyalkyl groups;

R¹⁵ is selected from the group consisting of H, substituted and unsubstituted alkyl groups, <u>and</u> substituted and unsubstituted aryl groups, <u>and</u> substituted and unsubstituted heterocyclyl groups;

R¹⁶ is selected from the group consisting of H, substituted and unsubstituted alkyl groups, substituted and unsubstituted aryl groups, substituted and unsubstituted heterocyclyl groups, -C(=O)H, -C(=O)-alkyl groups, -C(=O)-aryl groups, -C(=O)NH₂, -C(=O)NH(alkyl) groups, -C(=O)NH(aryl) groups, -C(=O)N(alkyl)₂ groups, -C(=O)N(aryl)₂ groups, -C(=O)N(alkyl)(aryl) groups, -C(=O)O-alkyl groups, -C(=O)O-aryl groups, substituted and unsubstituted aminoalkyl groups, substituted and unsubstituted alkylaminoalkyl groups, substituted and unsubstituted dialkylaminoalkyl groups, substituted and unsubstituted arylaminoalkyl groups, substituted and unsubstituted diarylaminoalkyl groups, substituted and unsubstituted (alkyl)(aryl)aminoalkyl groups, substituted and unsubstituted heterocyclylalkyl groups, -C(=O) heterocyclyl groups, -C(=O)-O-heterocyclyl groups, -C(=O)NH(heterocyclyl) groups, -C(=O)-N(heterocyclyl)₂ groups, -C(=O)-N(alkyl)(heterocyclyl) groups, -C(=O)-N(aryl)(heterocyclyl) groups, substituted and unsubstituted heterocyclylaminoalkyl groups, substituted and unsubstituted diheterocyclylaminoalkyl groups, substituted and unsubstituted (heterocyclyl)(alkyl)aminoalkyl groups, substituted and unsubstituted (heterocyclyl)(aryl)aminoalkyl groups, substituted and unsubstituted hydroxyalkyl groups, substituted and unsubstituted alkoxyalkyl groups, and substituted and unsubstituted aryloxyalkyl groups, and substituted and unsubstituted heterocyclyloxyalkyl-groups;

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γ.

R¹⁷, R¹⁹, and R²⁰ may be the same or different and are independently selected from the group consisting of H, -NH₂, -NH(alkyl) groups, -NH(aryl) groups, -N(alkyl)₂ groups, -N(aryl)₂ groups, -N(alkyl)(aryl) groups, -NH(heterocyclyl) groups, -N(heterocyclyl) groups, -N(heterocyclyl)₂ groups, substituted and unsubstituted alkyl groups, substituted and unsubstituted aryl groups, -OH, substituted and unsubstituted alkoxy groups, substituted and unsubstituted heterocyclyl groups, substituted aryloxy groups, heterocyclyloxy groups, -N(alkyl)OH groups, -N(aryl)OH groups, -N(alkyl)O-alkyl groups, -N(alkyl)O-aryl groups; and

R¹⁸ is independently selected from the group consisting of substituted and unsubstituted alkyl groups, and substituted and unsubstituted aryl groups.

- 2. (Canceled).
- 3. (Canceled).
- 4. (Previously Presented) The compound according to claim 1, wherein R³ is H and R¹³ is H.
- 5. (Previously Presented) The compound according to claim 4, wherein R⁴ and R⁷ are hydrogen.
 - 6. (Canceled).
 - 7. (Canceled).
 - 8. (Canceled).
 - 9-17. (Canceled).
- 18. (Original) A pharmaceutical formulation, comprising the compound according to claim 1 in combination with a pharmaceutically acceptable carrier.

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19. (Rejoined) A method of treating a patient in need of an inhibitor of vascular endothelial growth factor receptor tyrosine kinase, comprising administering an effective amount of the pharmaceutical formulation according to claim 18 to a patient in need thereof.

20-21. (Canceled).

22. (Canceled).

23. (Canceled).

- 24. (Previously Presented) The compound according to claim 4, wherein R¹ and R² join to form a substituted or unsubstituted 6 membered ring comprising at least one N atom.
- 25. (Previously Presented) The compound according to claim 4, wherein R¹ and R² join to form a substituted or unsubstituted 6 membered ring comprising one N atom.
 - 26. (Canceled).
- 27. (Previously Presented) The compound according to claim 4, wherein at least one of R⁵ or R⁶ is a substituted or unsubstituted heterocyclyl group comprising at least one O or N atom.
- 28. (Previously Presented) The compound according to claim 4, wherein at least one of R⁵ or R⁶ is a substituted or unsubstituted heterocyclyl group selected from the group consisting of morpholine, piperazine, piperidine, 1,2,3-triazole, 1,2,4-triazole, tetrazole, pyrrolidine, pyrazole, pyrrole, thiomorpholine, homopiperazine, benzimidazole, oxazolidin-2-one, pyrrolidin-2-one, imidazole, isoxazole, oxazole, isothiazole, thiazole, thiophene, furan, pyran, tetrahydrothiophene, tetrahydrofuran, tetrahydropyran, and pyridine.
 - 29. (Canceled).

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30. (New) The compound according to claim 4, wherein at least one of R⁵ or R⁶ is a substituted or unsubstituted piperazine group.

- 31. (New) The compound of claim 30, wherein at least one of ${\sf R}^5$ or ${\sf R}^6$ is an N-methyl piperazine group.
- 32. (New) The compound according to claim 4, wherein at least one of R⁵ or R⁶ is a substituted or unsubstituted morpholine group.
- 33. (New) The compound according to claim 4, wherein at least one of R⁵ or R⁶ is a substituted or unsubstituted pyrrolidine group.
- 34. (New) The compound of claim 33, wherein at least one of R⁵ or R⁶ is a dimethylamino substituted pyrrolidine group.